

REMARKS

Upon entry of the above amendment, claims 20-25 will have been newly added and no claims will have been amended. Further, claims 5, 9-13, and 18-19 have been canceled. Accordingly, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections together with an indication of the allowability of all of the claims in the present application, in due course.

In the Official Action, the Examiner objected to the specification and asserted that the cross reference to related applications should be updated to reflect the current status; i.e. Application No. 09/147,140 should be cited as U.S. Patent 6,309,485. Additionally, the Examiner asserted that the filing date of Application No. 09/147,140 should be amended to the date of December 17, 1998. Accordingly, Applicants have amended the specification and respectfully request withdrawal of the objection to the specification.

Further, the Examiner rejected claims 1, 3, 4, and 6 under 35 U.S.C. §103(a) as being unpatentable over JP 61-292242 in view of JP 63-213137 and EP 706178.

However, Applicants submit that the above-mentioned rejection is inappropriate as the references fail to disclose or suggest the combination of features recited in the claims. In this regard, Applicants submit that the present invention is directed towards, inter alia, a centerer comprising at least two contact pins and an air source that supplies air pressure to the centerer to extend the at least two contact pins, as recited in the claims. Moreover, as recited in the claims, the two contact pins are configured to simultaneously contact an inside

circumferential edge of the common center hole and are configured to retractably extend in radial directions to press against the inside circumferential edge of the common center hole, thereby aligning the superimposed substrates.

However, Applicants submit that the references (i.e., JP 61-292242, JP 63-213137, and EP 706178), alone or in combination, fail to disclose or suggest at least the above-mentioned features.

More specifically, in contrast to the Examiner's assertions, Applicants submit that the English language abstract of JP 61-292242 does not disclose or suggest, inter alia, a centerer comprising at least two contact pins, which are configured to retractably extend in radial directions. Rather, the English language abstract of JP 61-292242 discloses measuring terminals (4) that are "spread". However, the characteristic of being "spread" does not anticipate or render obvious the claimed feature of being configured to retractably extend in radial directions. Further, while the English language abstract of JP 61-292242 discloses a measuring meter as being movable in the axial direction (e.g., a vertical direction), it, however, does not disclose or suggest any elements as being movable in a radial direction. This is clearly evidenced by Figure 1, where pressure sensing elements 8, micrometers 9, and motors 10 are disclosed, but no radially movable elements, as recited, are disclosed.

Further, in relying upon both JP 63-213137 and EP 706178 in the combination, the Examiner admits to the significant deficiencies of JP 61-292242

in disclosing at least a laminator and an air source that supplies air pressure to the centerer, as recited in the claims.

Applicants also submit that the English language abstract of JP 63-213137 fails to supply the deficiencies of the English language abstract of JP 61-292242. That is, the English language abstract of JP 63-213137 does not disclose or suggest, inter alia, a centerer comprising at least two contact pins and an air source that supplies air pressure to the centerer to extend the at least two contact pins, as asserted by the Examiner. Rather, the English language abstract of JP 63-213137 is directed towards using an air cylinder to raise a pin (4). In JP 63-213137, there is no disclosure or suggestion of supplying air pressure to extend at least two contact pins, as recited in the claims.

In addition to a lack of disclosure or suggestion of the above mentioned features, Applicants submit that JP 63-213137 also does not disclose or suggest at least a second substrate, as recited in the claims. Applicants submit that JP 63-213137 is directed towards joining a center hub and a transparent substrate and is not directed towards the alignment of superimposed substrates. Since JP 63-213137 is not directed towards superimposing substrates or the alignment thereof, JP 63-213137 does not provide or even suggest any of the claimed features of superimposing and aligning a first and a second substrate.

Furthermore, Applicants submit that EP 706178 does not supply the deficiencies of JP 63-213137 and JP 61-292242 with regards to the above-mentioned features. In discussing EP 706178, the Examiner explicitly admits that

EP 706178 fails to disclose such features, as evidenced by the following statement (provided on page 5 of the Official Action): "Europe '178 does not recite a centerer having at least two contact pins". Moreover, Applicants submit that EP 706178 fails to disclose a centering device or any device that is configured to press against a common center hole and align the substrates.

In addition to the failure of JP 63-213137, JP 61-292242, and EP 706178, taken alone or in combination, in disclosing the claimed combination of features, Applicants respectfully submit that there is a lack of motivation to modify the references, as proposed by the Examiner. In order for the Examiner to support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to be obvious in light of the teachings of the references. In this regard, Applicants respectfully request withdrawal of the rejection as the Examiner has provided neither a convincing line of reasoning nor an assertion of implied/express suggestion in the references themselves for the asserted modifications.

Thus, for at least each of the above-noted reasons, Applicants respectfully request withdrawal of the outstanding rejection together with an indication of the allowability of the claims.

Additionally, in the Official Action, the Examiner rejected claims 1, 3, 4, 6, 14, and 16 under 35 U.S.C. §103(a) as being unpatentable over EP 706178 in view

of JP 61-292242, JP 63-213137, and at least one of JP 4-57234 and JP 62-124629, hereinafter the above references will be collectively referred to as “the set of references”. Claims 2, 7-8, and 15-17 were rejected under 35 U.S.C. §103(a) as being unpatentable over “the set of references” in further view of JP 4-139630. Claim 4 was rejected under 35 U.S.C. §103(a) as being unpatentable over “the set of references” in further view of KOMORI (U.S. Patent No. 5,227,213). Claim 6 was rejected under 35 U.S.C. §103(a) as being unpatentable over “the set of references” in further view of JP 8-36786.

Applicants respectfully traverse the above-noted rejection of at least claims 1 and 14 and submit that it is inappropriate with respect to the combination of features recited in the claims. In this regard, Applicants submit that the rejection regarding “the set of references” also fails to disclose at least a centerer comprising at least two contact pins and an air source that supplies air pressure to the centerer to extend the at least two contact pins.

In this regard, the Examiner even admits that EP 706178 does not disclose or suggest at least a centerer comprising at least two contact pins. Thus, the Examiner relies upon JP 61-292242 for disclosing a centerer having radially movable contact pins.

However, in contrast to the Examiner’s assertions and as discussed earlier in the remarks, Applicants submit that JP 61-292242 also fails to disclose at least a centerer comprising at least two contact pins that are configured to retractably extend in radial directions, as recited in the claims. Rather, JP 61-292242 is

directed towards providing measuring terminals which are spread and which are movable in the axial direction (i.e. the vertical direction), but which are not configured to retractably extend in radial directions. In this regard, Applicants direct the Examiner's attention to Figure 1, which illustrates only the vertical movement of the measuring meter. Figure 1, however, does not disclose or suggest any radial movement.

Further, Applicants submit that JP 63-213137 also does not disclose or suggest supplying air pressure to the centerer to extend the at least two contact pins, which are configured to retractably extend in radial directions, as recited in the claims. Rather, the English language abstract of JP 63-213137 is directed towards using an air cylinder to raise a pin (4).

Additionally, JP 04-057234 fails to disclose at least the claimed feature of supplying air pressure to the centerer to extend the at least two contact pins. Rather, JP 04-057234 is directed towards having shaft members 18 and 20 being pushed downwards and guided by guiding member 24. JP 04-057234, however does not disclose or suggest supplying air pressure to a centerer to extend at least two contact pins in radial directions.

Moreover, in addition to the other references, JP 62124629 also does not disclose or suggest at least a centerer comprising at least two pins which are configured to retractably extend in radial directions and an air source that supplies air pressure to the centerer to extend the at least two contact pins, as recited in the claims. Rather, JP 6214629 is directed towards a hollow member of a central shaft

that is configured to expand and align holes 22, 23. JP 6214629, however, does not disclose any contact pins since the hollow member itself establishes contact with holes 22, 23.

With regards to the Examiner's rejection, Applicants also note the Examiner's emphasis on a "centering means" as simultaneously contacting inner circumferential edges of the holes. Applicants, however, submit that the claim specifically recites that at least two pins are configured to simultaneously contact an inside circumferential edge of the common center hole and not that a "centering means" simultaneously contacts inside circumferential edges, which was asserted by the Examiner in applying JP 6214629 to reject Applicants' claimed combination of features.

Furthermore, Applicants submit that Examiner's obviousness assertions and proposed modifications are not supported by appropriate evidence and are also lacking in motivation. For example, as illustrated in Figure 2, EP 706178 is directed towards providing a glass plate 11 disposed on the substrate to provide a bonded disk that is not deformed and to provide a substantially negligible disk tilt. However, if EP 706178 were modified in the manner proposed by the Examiner, the intended mode of operation of EP 706178 would be destroyed. That is, if EP 706178 was modified to have the positioning jigs 6, 8, and shafts 18, 20 of JP 04-057234 to center the substrates, the resulting configuration might damage or destroy the glass plate 11 due to the pressure of the upper jig 6. In other words, as disclosed in the above example, each of the proposed modifications might damage

or destroy the glass plate and the discs, thereby undermining the objectives of the references. Besides it being unobvious to those of ordinary skill in the art to modify EP 706178, as asserted by the Examiner, the result of such modifications would not only lack each and every element as recited in the claims, but would also be quite different from that of the present invention.

Accordingly, the rejections, as presented and set forth in the Official Action, appear to be based upon using Applicants' disclosure together with impermissible hindsight reasoning to reconstruct the prior art so as to reject the Applicants' claimed invention. As discussed herein, the U.S.C. §103(a) rejections are improper and inappropriate for not only failing to disclose each and every feature in the claimed combination, but also for failing to provide at least one of the following: motivation, a convincing line of reasoning, and implied/expressed suggestion in the references. Accordingly, Applicants respectfully request withdrawal of the rejections together with passage of the present application to issue.

Furthermore, Applicants submit new claims 20-25 for the Examiner's consideration. New claims 20-21 are believed to be allowable for the combination of features recited therein, e.g. the feature of at least a cylinder coupled to each contact pin to retractably extend in a radial direction in accordance with operation of the air source. Also, new claims 22-23 are believed to be allowable for at least the combination of features recited therein, such as the feature of a contact pin being configured to simultaneously contact inner circumferential edges of the first

and second substrates. Further, for at least reciting the feature of a longitudinal axis of each contact pin as extending substantially parallel to a thickness direction of the substrates, new claims 24-25 are also asserted to be allowable. In addition, Applicants submit that new claims 20-25 are also allowable for at least depending on either claim 1 or 14, which Applicants have shown to be allowable. Thus, Applicants respectfully request an indication of the allowability of new claims 20-25 in addition to all of the other claims in the present application.

Thus, in view of the herein-contained remarks, Applicants submit that claims 1 and 14 are in condition for allowance. With regard to dependent claims 2-4, 6-8, 15-17, and 20-25, Applicants assert that they are allowable on their own merit, as well as because they depend either directly or indirectly from independent claim 1 or claim 14, which Applicants have shown to be allowable.

Accordingly, Applicants respectfully request reconsideration of the outstanding rejections, withdrawal of the outstanding rejections, and an indication of the allowability of all claims in the present application. Such action is respectfully requested and is now believed to be appropriate and proper.

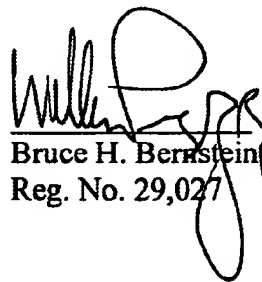
SUMMARY AND CONCLUSION

Applicants believe that the present application is in condition for allowance, and respectfully request an indication to that effect. Applicants have amended the claims to enhance clarity only and argued their allowability. Accordingly, reconsideration of the outstanding Official Action and allowance of the present application and all the recited claims therein are respectfully requested and now believed to be appropriate.

The amendments to the claims made in this amendment have not been made to overcome the prior art, and thus, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Examiner have any questions or comments regarding this Response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
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